

SiteManager **Training Manual**



Module I Chapter 2

Filter/Find/Sort

Student's Version

Indiana Department of Transportation
May 2007, Version 3.7b

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Using Filter, Find and Sort

In many areas of SiteManager, the large numbers of records makes finding a particular record a difficult or time consuming task. To help make retrieval of data easier, SiteManager provides a Search, Filter, Find, and Sort capability throughout the program. The Filter and Find functions also provide the user with the ability to limit the amount of data retrieved from the SiteManager database by specifying criteria using relational operators. These techniques will be demonstrated within the **Sample Information** window.

The **Find** feature will locate a **single specific record** based on criteria input by the user.

The **Filter** feature will locate a **group of records** (one or more) meeting the criterion input by the user, and is more flexible and useful.

The **Sort** feature arranges records in an ascending or a descending order. There are two methods to sort data in SiteManager; by column header (ascending order only), or by object panel **Sort** function.

Creating a Filter

Filter: The filter function can be used in many areas of Site Manager. If filtering is available, a pop-up window showing options can be displayed by “right-clicking” the mouse. If **Filter** is not grayed out, a filter can be created for the panel. This section discusses:

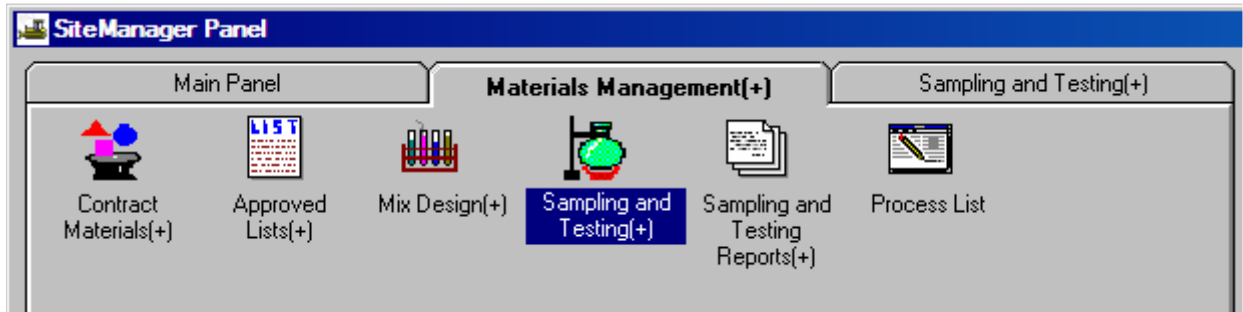
- creating a filter
- saving a filter
- creating a default filter
- loading saved filters
- deleting filters
-

Trainer's Note:

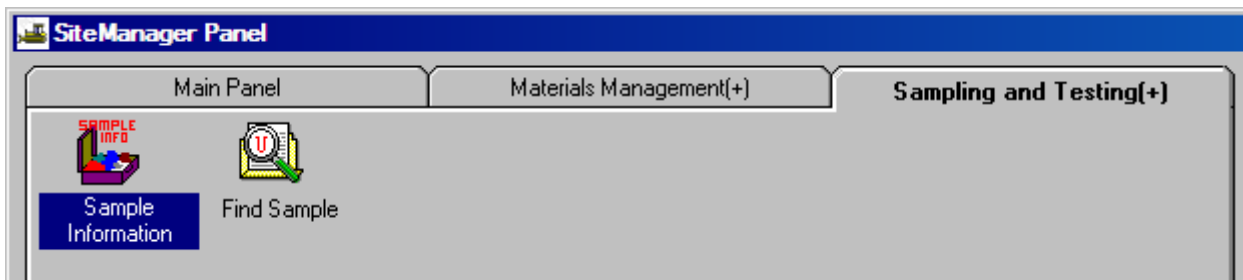
Equivalent Filters: Zoom Box = Ctrl + Z



“Double-click” on **Materials Management (+)** located on the Main Panel.



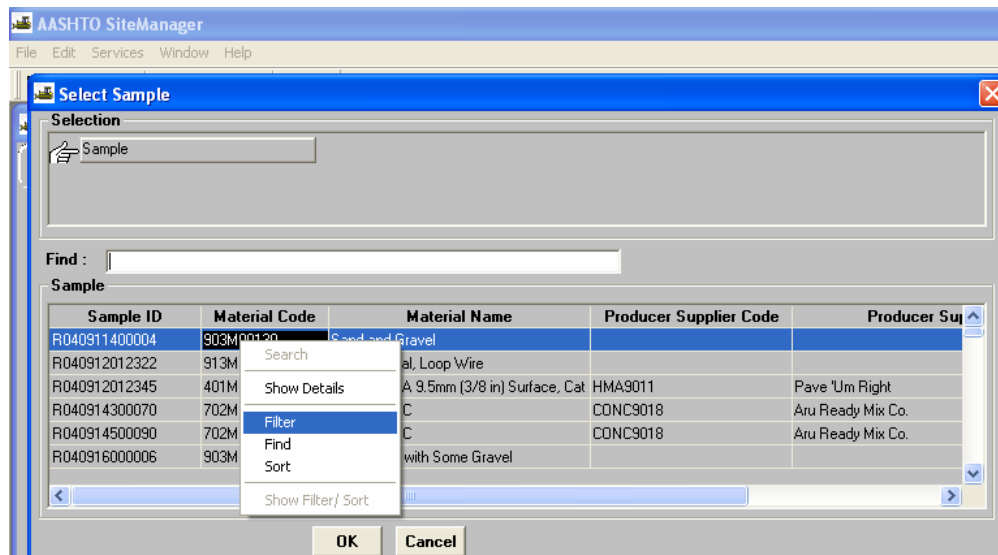
“Double-click” on **Sampling and Testing (+)**.



“Double-click” on **Sample Information**.

The screenshot shows the 'AASHTO SiteManager' application window. The 'Maintain Sample Information' window is open, displaying a form for entering sample data. The form includes fields for 'Sample ID', 'Sample Unit', 'Status', 'Revised By', 'Revising', 'Sample Date', 'Link To', 'Link From', 'Log Date', 'Sample Type', 'Sampled By', 'Material', 'P/S-Mnfctr', 'Type', 'City', 'Geog Area', 'Prod Nm', 'Intended Use', 'Auth By', 'Auth Date', and 'Represented Quantity'. The 'Open' button, represented by a folder icon, is highlighted on the toolbar.

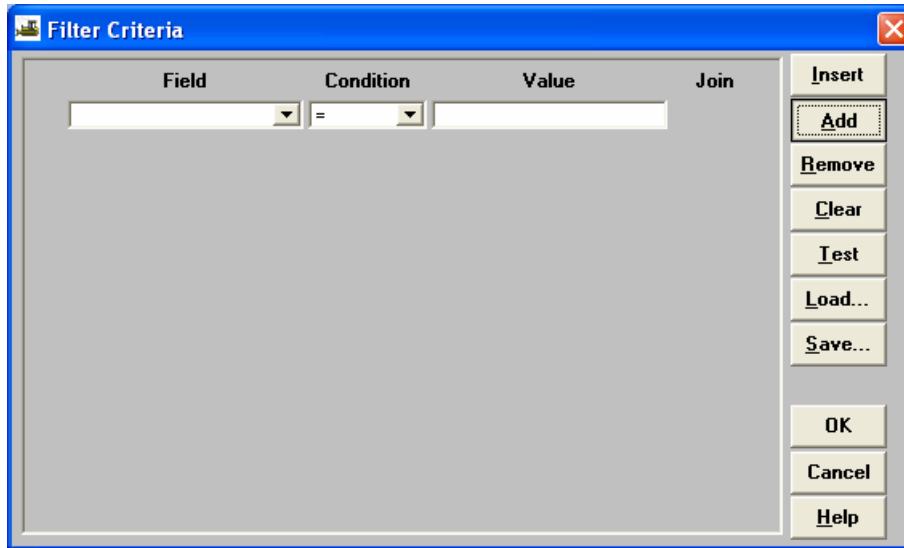
“Click” on the **Open**  button located on the toolbar.



“Right-click” anywhere on the panel where the list is located.
 “Click” the **Filter** option.



The **Filter Criteria** window appears. This is where filter criteria will be selected.



Criteria Window Buttons.

There are ten buttons that make up the criteria for the filter:

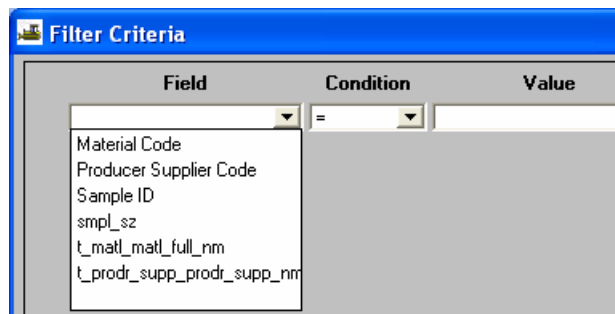
- **Insert:** Places a new row above a current row
- **Add:** Adds a new row to the bottom of the other criteria rows
- **Remove:** Deletes the current row.
- **Clear:** Deactivates all rows and criteria from the window. Clear does not remove or delete any saved or default filters.
- **Test:** Tells the number of records the filter will display.
- **Load:** Displays a list of saved queries which can be used.
- **Save:** Save the current query for future use.
- **OK:** Makes the current query active.
- **Cancel:** Cancels the filter operation.
- **Help:** Displays information for the icon that has been previously activated. Help does not show help for Filter.

“Click” on the **Add** button to place a selection row in the Criteria area.

There are four fields that make up the parameters for filter criteria:

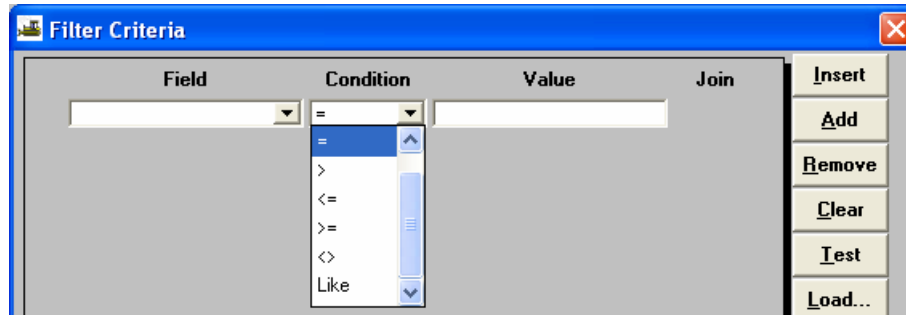
- **Field**
- **Condition**
- **Value**
- **Join**

Trainer Note: The **Clear** button temporarily deactivates any filter shown. This does not remove/delete any saved/default filters.



Trainers Note: Strange looking field names, such as t_matl_matl_full_nm are lookup fields from another table that appear on the window as a conventional field name

Field: This field is a drop down list that contains the types of data available to be filtered.



Condition: This field is a drop down list of comparison operators.

<	Less Than
=	Equal to or Exact Match
>	Greater than
<=	Less than or equal to
>=	Greater than or equal to
<>	NOT Equal to
Like	Similar to, (Starts with the same characters, with anything following)

These operators may be applied to numerical or text **Values**. When used with text in the **Value** field, there are some rules that need to be followed.

- Special characters, such as the asterisk (*) are less than numbers.
- Numbers are less than letters.
- Uppercase and Lowercase letters are the same.

The **Like** condition is the most versatile for use. The **Like** condition selects records based on the characters entered in the Value field, regardless of the following characters in the string. For example, selecting Producer Suppliers Code as the search **Field**, selecting the **Like** condition, and entering “CONC” in the **Value** field, will result in a list of all producers with a code starting with “CONC”, regardless of the letters or numbers following “CONC” (i.e., CONC9011, CONC9023, etc.).

Trainer’s Note: % = .. (dot dot) in paradox applications

Field	Condition	Value	Join
	=	ENTER CRITERIA HERE	

Buttons: Insert, Add, Remove, Clear, Test

Value: This field is where the data will be entered to use for the filter. If you want to base your criteria on a word or a part of the data that may be in the middle of a field, you can surround the word or data string with a wildcard that will match any group of characters. In SiteManager, the wildcard is %, (the percent symbol). *The wildcard is not required to be used in conjunction with the **Like** condition; but, the **Like** condition must be selected if using a wildcard.* Also, remember the rules for the other comparison operators previously documented.

Example: %702% means that the number “702” is located anywhere within the field.

Field	Condition	Value	Join
Material Code	Like	904	and
	=		

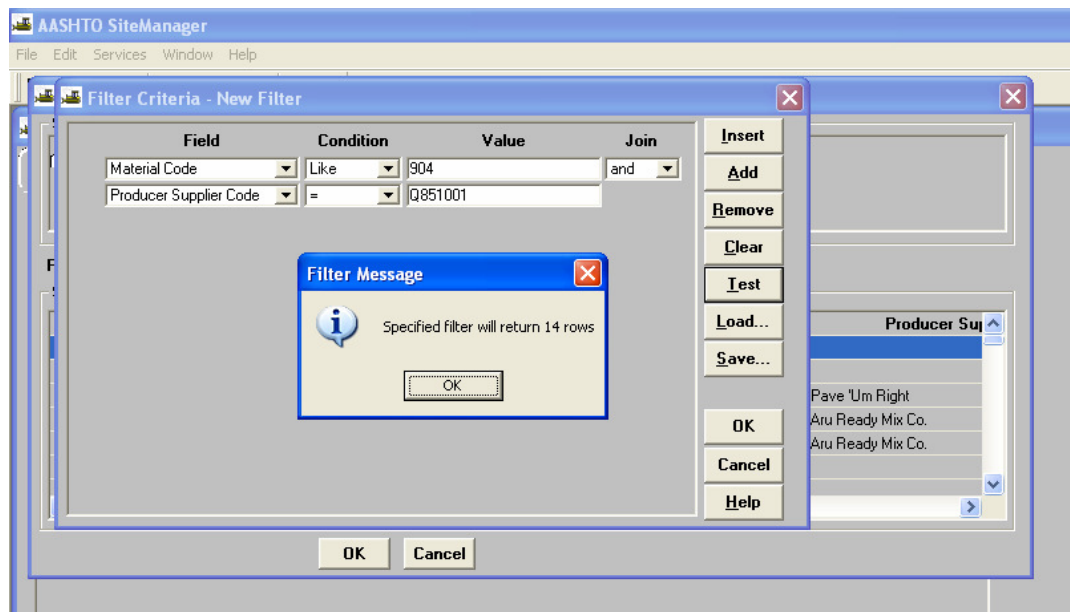
Buttons: Insert, Add, Remove, Clear

Join dropdown: and, or, or

Join: This field is used when multiple rows of criteria are needed to locate the data. The **Join** field becomes available when the **Add** button is “clicked” for the second time. There are two choices for **Join** field. The choices are **and** / **or**. If the **and** choice is selected, all the rows must be true. When the **or** choice is selected, either of the rows can be true.

NOTE: If “**and**” / “**or**” joins are combined, the “**and**” joins are acted upon before the “**or**” joins. Care must be taken in constructing the selection criteria and joins. If the results are not what you expect, try changing the joins.

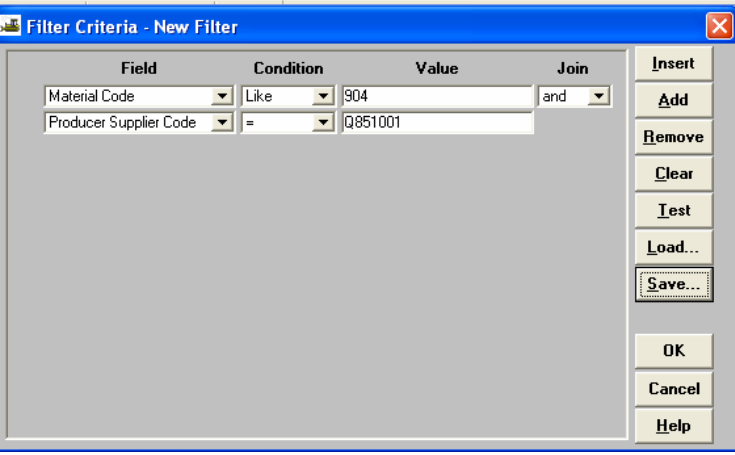
Trainer Note: Demonstrate how selecting wrong joins produces unexpected or no results. State this is a common mistake made by even experienced users



When you have finished with your **Filter** criteria, click on the **Test** button. This will give the number of records the filter will display. If no records are available, modify the criteria for the filter. If there are records available, “click” the **OK** button on the **Filter Message** pop up. Then “click” the **OK** button on the **Filter Criteria** window to apply the filter.

Trainer’s Note: Click on the blue header bar located on the Filter Criteria window to move this window in order to clarify which OK button to click first.

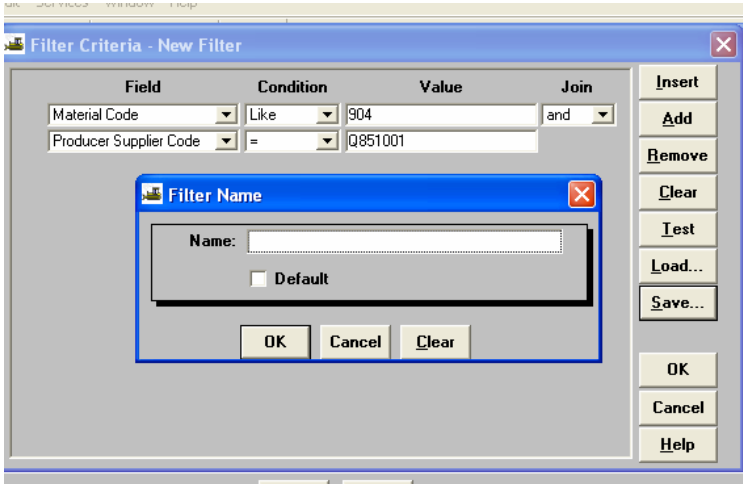
Saving a Filter



The "Filter Criteria - New Filter" dialog box is shown. It contains a table with four columns: Field, Condition, Value, and Join. The first row has "Material Code" in the Field column, "Like" in the Condition column, "904" in the Value column, and "and" in the Join column. The second row has "Producer Supplier Code" in the Field column, "=" in the Condition column, "Q851001" in the Value column, and an empty Join column. To the right of the table are buttons: Insert, Add, Remove, Clear, Test, Load..., Save..., OK, Cancel, and Help. The Save... button is highlighted.

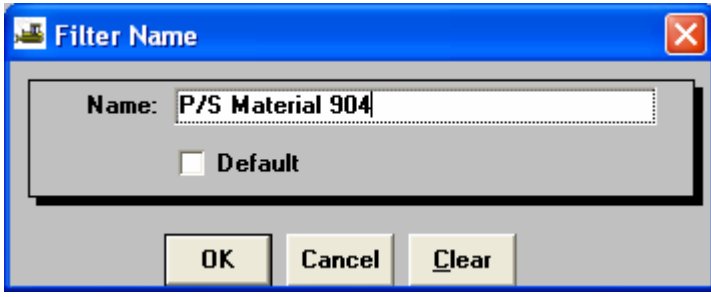
Field	Condition	Value	Join
Material Code	Like	904	and
Producer Supplier Code	=	Q851001	

Many times you will have filters that you will want to use repeatedly. Once the criteria for the filter have been set, that filter can be saved for future use.



The "Filter Criteria - New Filter" dialog box is shown with the "Filter Name" dialog box open. The "Filter Name" dialog box has a "Name:" label and a text field. The text field is empty. Below the text field is a checkbox labeled "Default". At the bottom of the "Filter Name" dialog box are buttons: OK, Cancel, and Clear. The "Filter Criteria - New Filter" dialog box is the same as in the previous image, with the Save... button highlighted.

After setting all the criteria for the filter, “click” on the **Save** button. This will bring up the **Filter Name** dialog box.



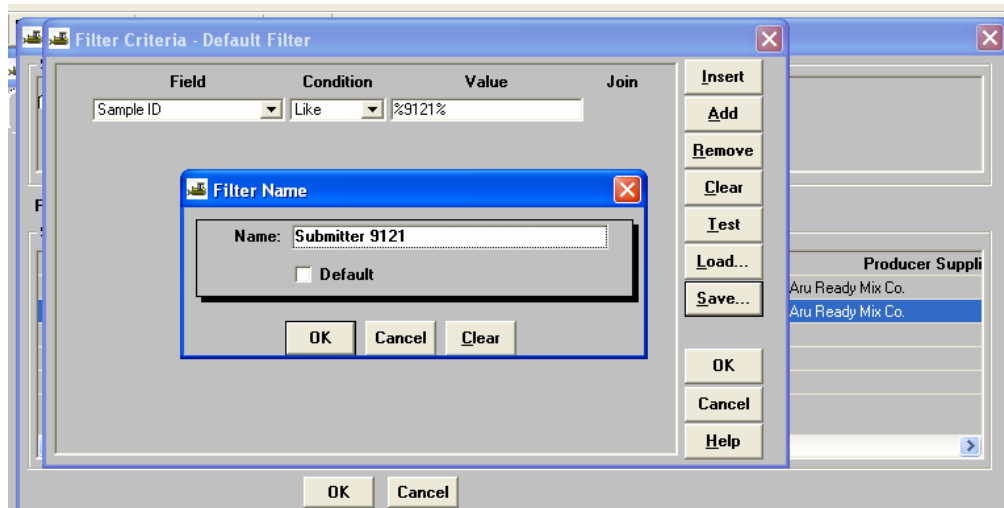
The "Filter Name" dialog box is shown. It has a "Name:" label and a text field. The text field contains the text "P/S Material 904". Below the text field is a checkbox labeled "Default". At the bottom of the dialog box are buttons: OK, Cancel, and Clear.

“Enter” the Filter Name in the **Name** field.

“Click” the **OK** button.

Default Filter

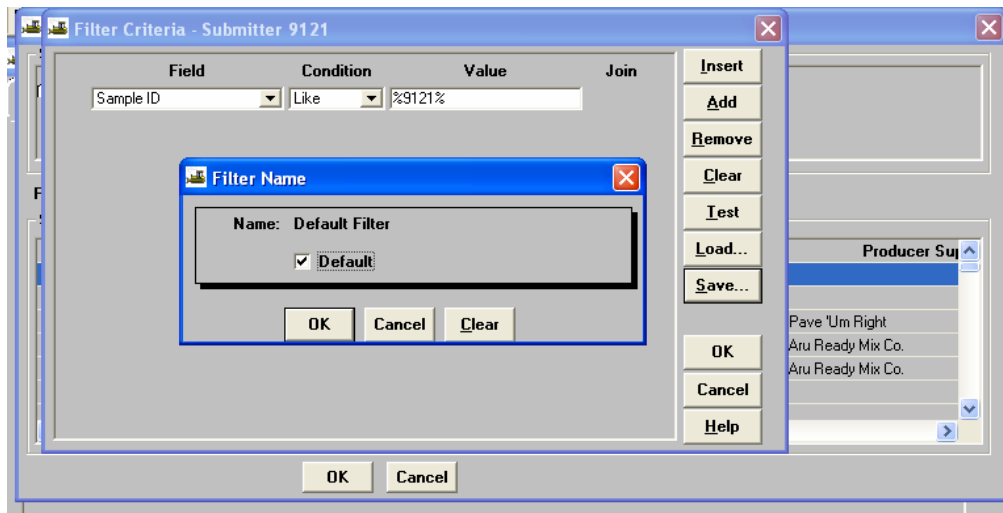
If you wish to have a filter automatically applied every time you open a particular window, you may establish a Default filter.



After setting all the criteria for the filter, “click” on the **Save** button. This will bring up the **Filter Name** dialog box.

“Click” the **Default** check box. “Click” the **OK** button on the pop up.

NOTE: When a filter is designated as Default, the name of the filter is automatically changed to “Default”.



CAUTION: If you mark the Default box, this filter will be **active** every time you open that window. Upon opening the window, the user will see **only** those records which meet the criteria of the Default filter. This can be a very useful feature. However, the user must be mindful of this fact. There may be other records that you want to see, but do not appear because a default filter is in effect.

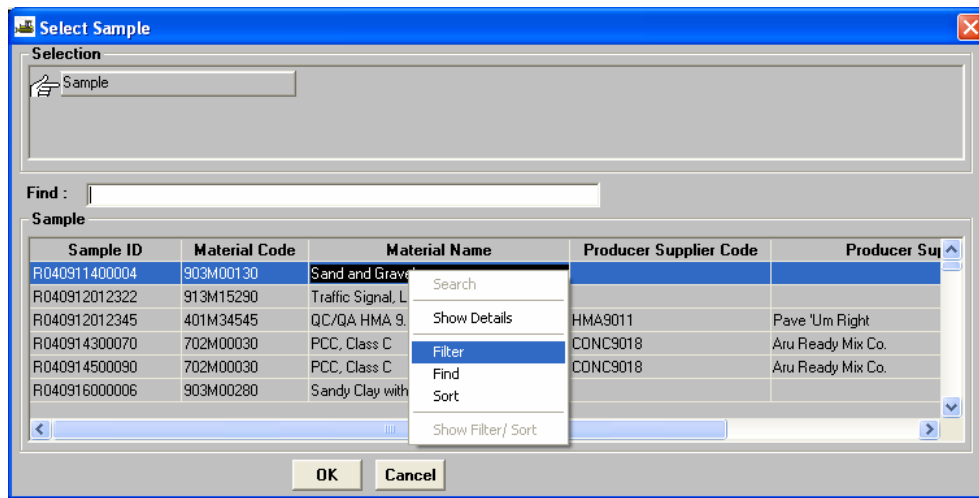
Default filters can be temporarily cleared or permanently removed. This will be explained in the following sections.

Default filters (and filters in general) are unique to individual users. The default filter one user establishes will not be applied to other users. Other users **may** establish the exact same filter for their needs.

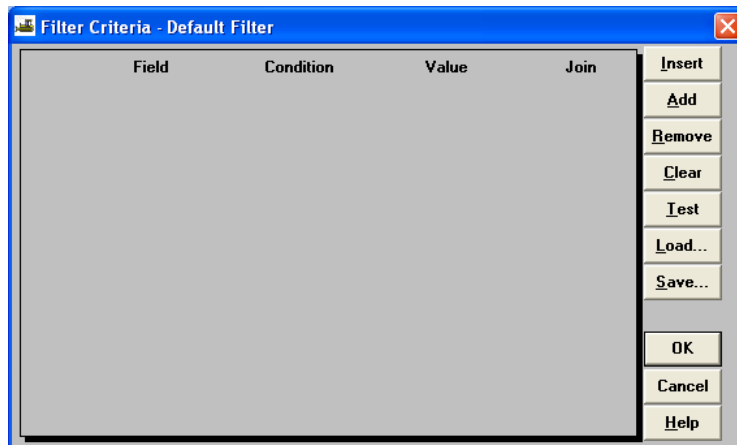
Individual filters only apply to the window from which they were created. They are not available in other windows. New filters must be created for those.

Trainer Note: Demonstrate that a default filter stays in effect even if the user closes SiteManager and starts over.

Load Saved Filters

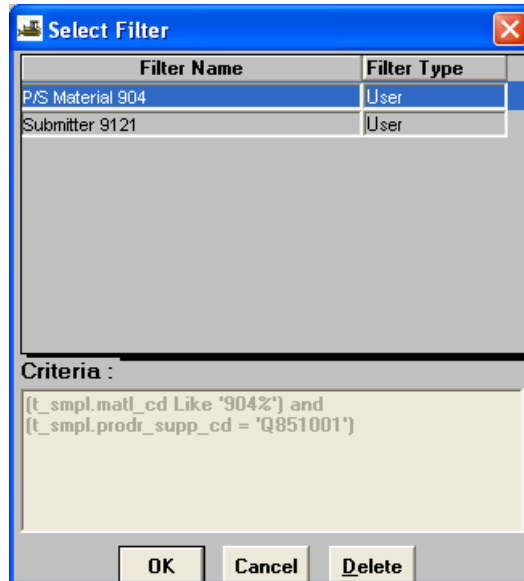


To load a saved filter, open the Filter Criteria window.

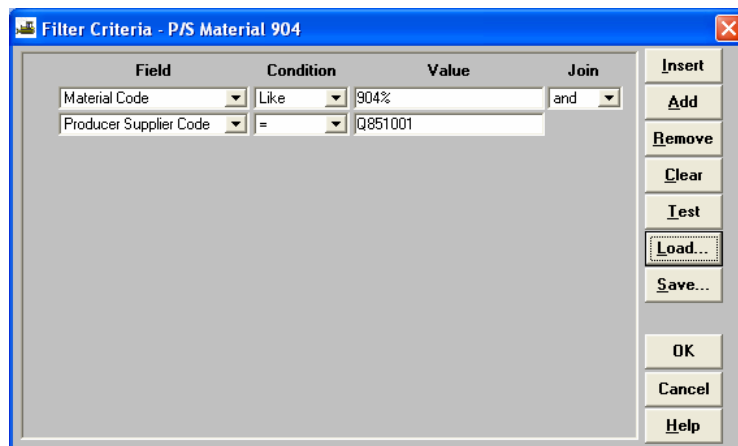


“Click” on the **Load** button. This will bring up a list of saved filters.

Trainers Note: Remember you must have previously saved a filter in order to have one to load



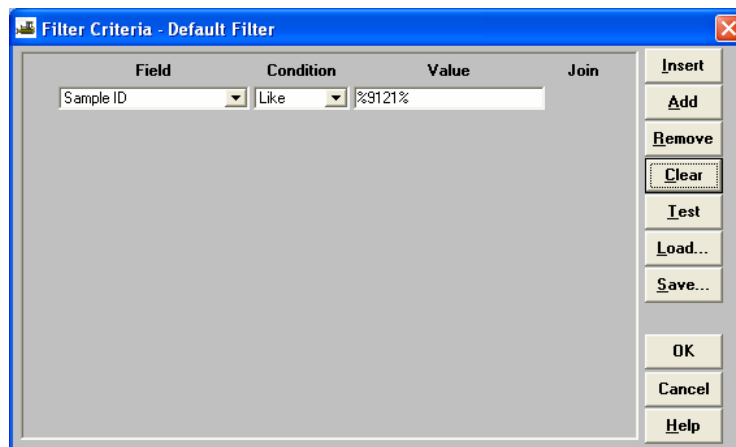
Select a filter from the list.
 “Click” on the **OK** button.



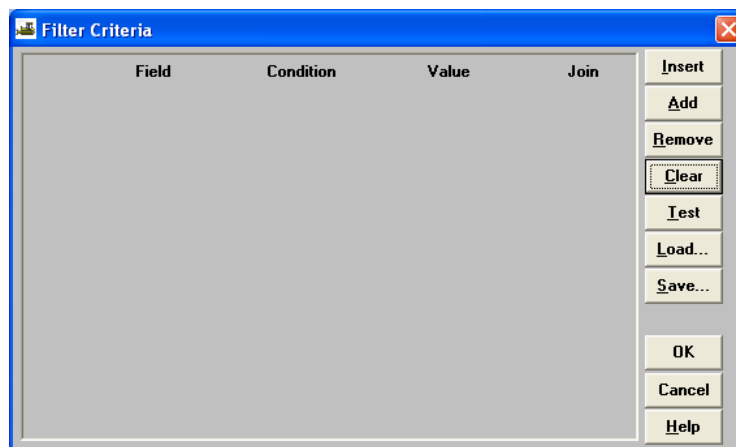
“Click” on the **OK** button on the Filter Criteria window to apply the filter.

Clearing Filters

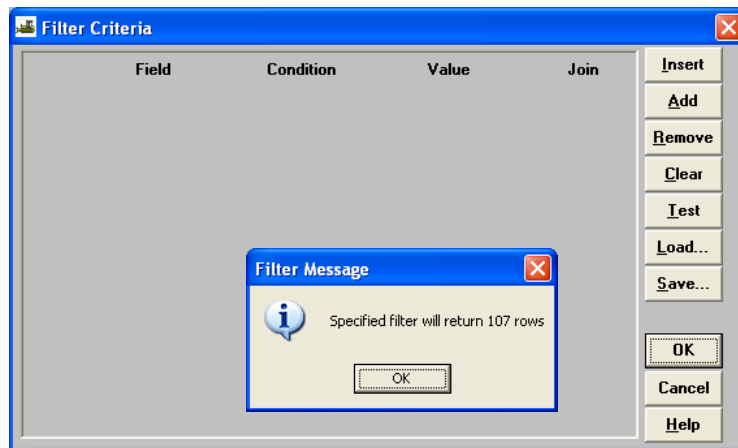
When filters are applied, the user can only see those records that match the current filter. For standard filters, once the user exits the main window, the filter is no longer active. The next time the window is viewed, all records are present. However, with a **Default filter**, the filter is active every time the window is viewed. If the user wishes to apply a different filter, this can be done as shown in the Load Saved Filters section beginning on page 11. If the user wants to see **all** records, then the active filter needs to be cleared (not removed).



To clear an active filter, open the **Filter Criteria** window. The current active filter is displayed.

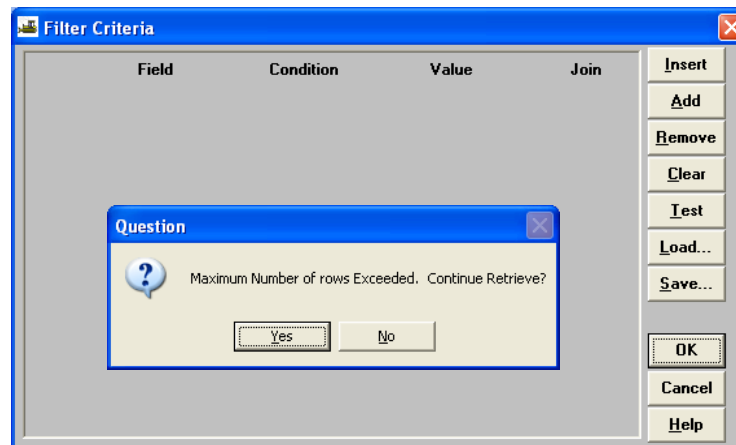


“Click” on the **Clear** button, to remove the filter from the active window.



“Click” the **OK** button. A **Filter Message** will appear indicating the number of records (rows) that will be visible. This will equal the total number of records in the database.

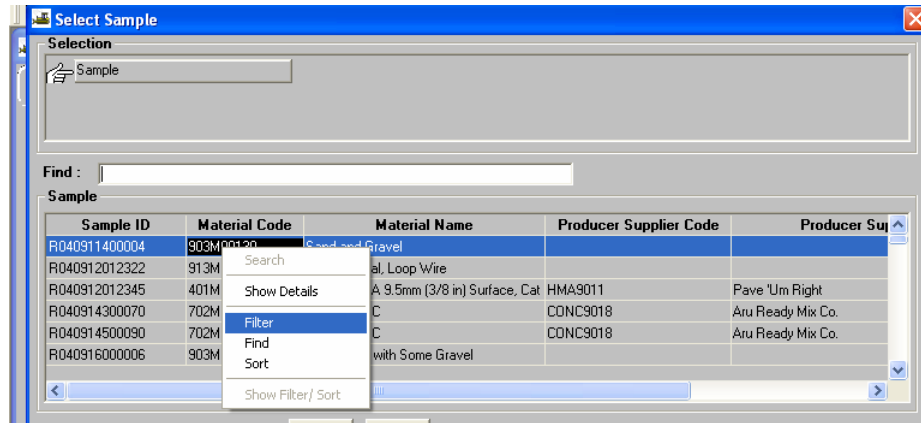
“Click” **OK** on the **Filter Message**.



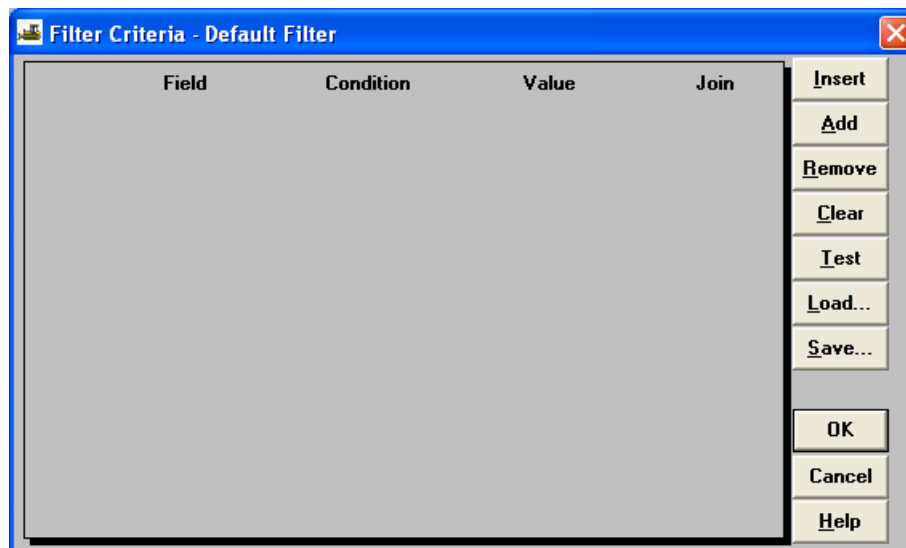
The user may receive a Question message as shown above. Simply “Click” on **Yes** to proceed.

NOTE: This process can also be used if a user wants to clear a standard filter without having to exit the main window. Also, remember that a Default filter will automatically be re-applied when the next time the main window is open. To permanently remove Default filters, see **Deleting Filters** below.

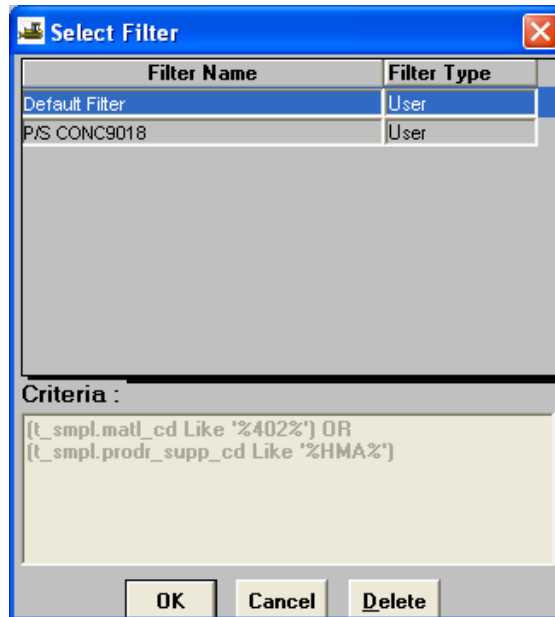
Deleting Filters



To delete a Filter, open the Filter Criteria window.



“Click” on the **Load** button. This will bring up a list of saved filters.

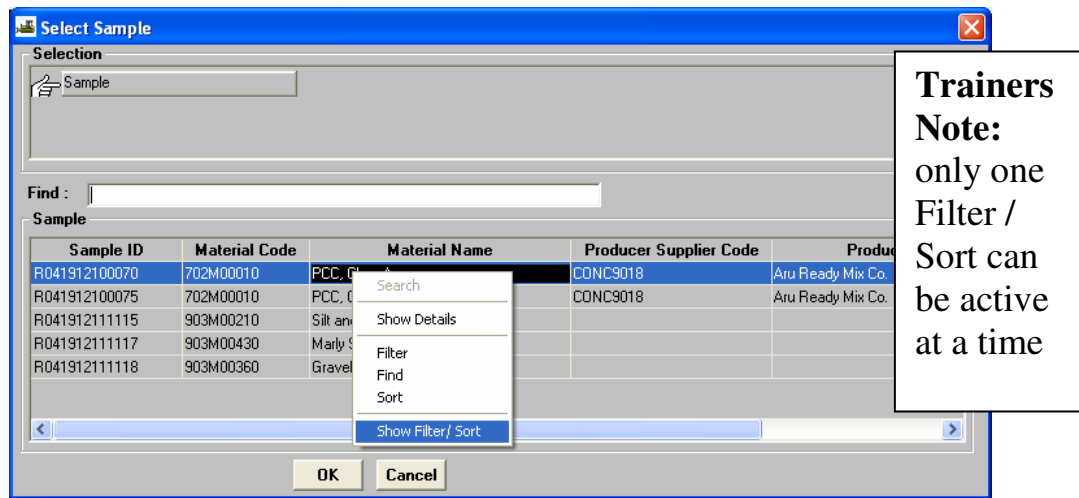


“Select” the filter you wish to delete, and “Click” the **Delete** button.

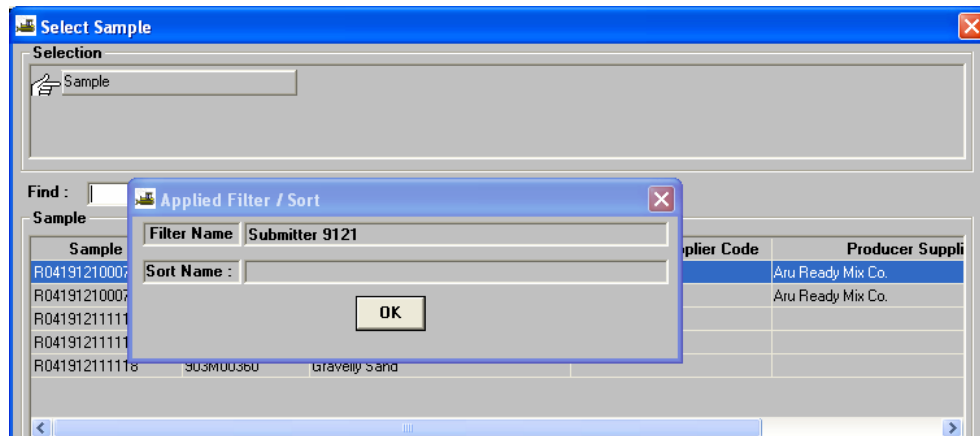
Trainers Note: you can delete the Default filter this way or if you set a ‘NEW’ default it will over write the old one.

Show Filter Sort

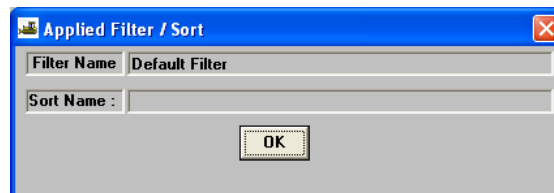
This option shows you which, if any, **Filters** or **Sorts** are currently active to the widow.



Right click the list to bring up the choice window. If the option is grayed out, then no Filter or Sort is currently being applied.



“Click” the **Show Filter/Sort**.



If a **Default Filter** has been established, it will be indicated.

Creating Saving and Loading Filters

I-2 1Group Exercise

In the following exercise, you will create, save, and load a filter to locate sample records using producer/supplier - material code relationship. The producer/supplier is HMA9012 and the material code starts with 402.

A) Creating a Filter

Log into SM with User ID: inquire
Password: pass

Navigation from **Main Panel**:

1. “Double-click” on **Materials Management (+)** icon
2. “Double-click” on **Sampling and Testing (+)** icon
3. “Double-click” on **Sample Information** icon
4. If the list of Sample ID’s is not available, “click” on the **Open** button.
5. “Right-click” on the **Select Sample** panel.
6. “Click” on **Filter**
7. “Click” on the **Add** button
8. **Field:** Select: Producer Supplier Code
9. **Condition:** Select: =
10. **Value** Enter: HMA9012
11. “Click” on the **Add** button
12. **Join:** Select: and
13. **Field:** Select: Material Code
14. **Condition:** Select: Like
15. **Value:** Select: 402%

16 “Click” on the **Test** Button.

16. Trainer’s Note: notice 0 rows are returned.

17 Change the Join to “**or**”, and “Click” on the **Test** button.

17. Trainer’s Note:
notice 20 rows are
returned.

18 “Click” the **OK** button.

18. Trainer’s Note: Look over records returned

If continuing to section B, do not double-click on
a Sample ID.

Creating a Default Filter

B) Saving the Filter

19. “Right-click” on the Sample panel.
20. “Click” on **Filter**.
21. “Click” on **Save**.
22. Enter **HMA9012 or Code 402** for the Name. “Click” **OK**.
23. “Click” **OK** on the Filter Criteria window. “Click” **OK** on the Filter Message.
24. Close the Select Sample window **by double-clicking on a Sample ID**.

C) Loading a Filter

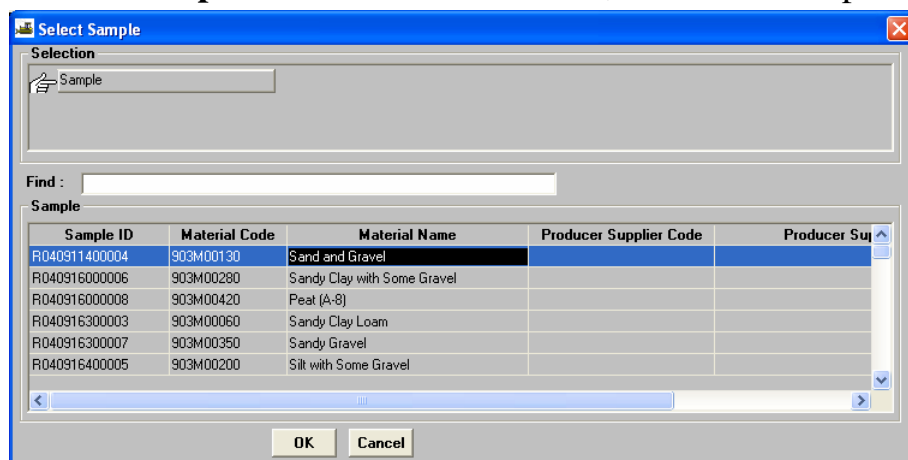
25. From the Maintain Sample Information window, “Click” on the **Open** icon in the tool bar.
26. “Right-click” on the Select Sample panel.
27. “Click” on **Filter**.
28. “Click” on the **Load** button on the Filter Criteria window.
29. Select the **HMA9012 or Code 402** filter. “Click” **OK** on the Select Filter window.
30. “Click” **OK** on the Filter Criteria window.
31. “Click” **OK** on the Filter Message.

Creating a Default Filter

I-2 2 Group Exercise

In the following exercise, you will create, save, and load a Default Filter to locate sample records using -a material code relationship. The material code starts with 903.

1. From the Maintain Sample Information window, “Click” on the **Open** icon in the tool. bar.
2. “Right-click” on the Sample panel.
3. “Click” on **Filter**.
4. “Click” on the **Add** button
5. **Field:** Select: Material Code
6. **Condition:** Select: Like
7. **Value:** Enter: 903
8. “Click” the **Test** button on the Filter Criteria window.
9. “Click” **OK** on the Filter Message.
10. “Click” **Save** on the Filter Criteria window.
11. When the **Filter Name** panel appears, “click” the box next to **Default**. Notice the name is automatically changed to **Default**.
12. “Click” **OK** on the **Filter Name** panel.
13. “Click” **OK** on the **Filter Criteria** window.
14. “Click” **OK** on the Filter Message
15. If Question box appears “Maximum Number of rows Exceeded. Continue Retrieve?”, “Click” **Yes**.
16. Review the records returned, and then close the Select Sample window **by double-clicking on a Sample ID**.
17. “Click” on the **Open** button on the Tool Bar, to select a sample.



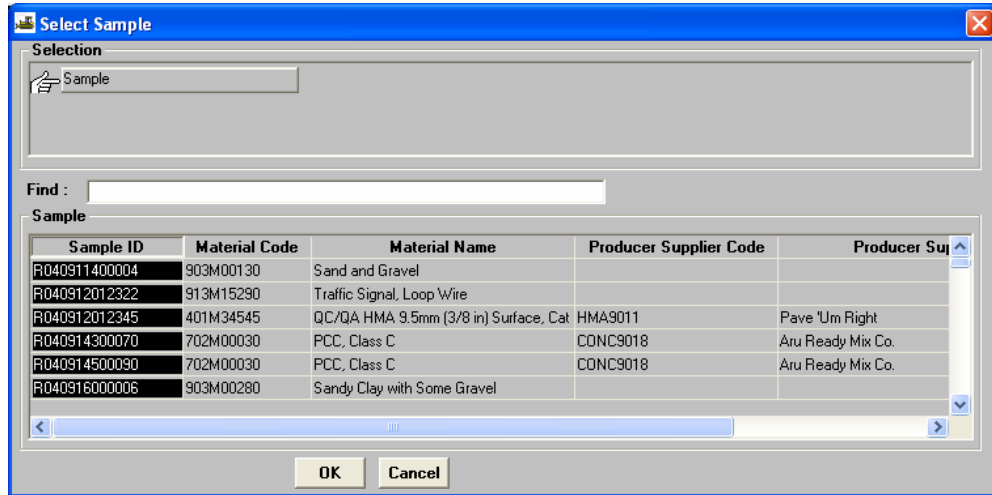
Notice the same sets of records are present on the Select Sample window. The default Filter is active. Only records meeting the criteria of the Default Filter will be available until the filter is cleared or permanently removed or replaced.

Sort

There are 2 methods to sort data in SiteManager.

- by column header, (ascending order only)
- by object panel **Sort** function

Sorting By Column Header

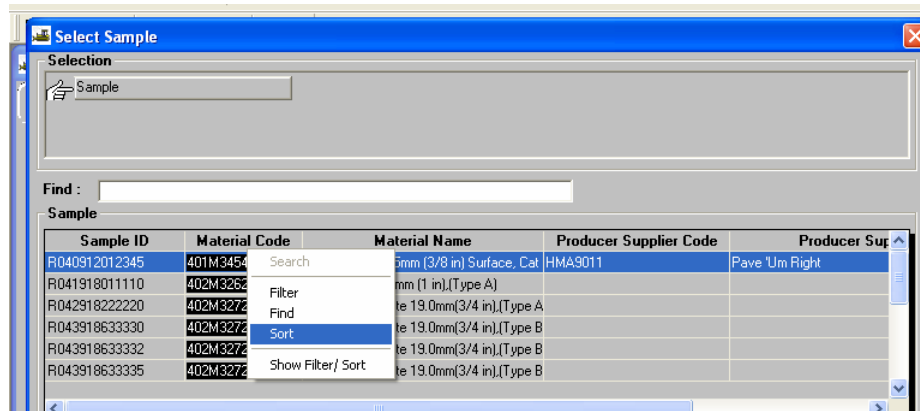


“Click’ on the Column Header that needs to be sorted.

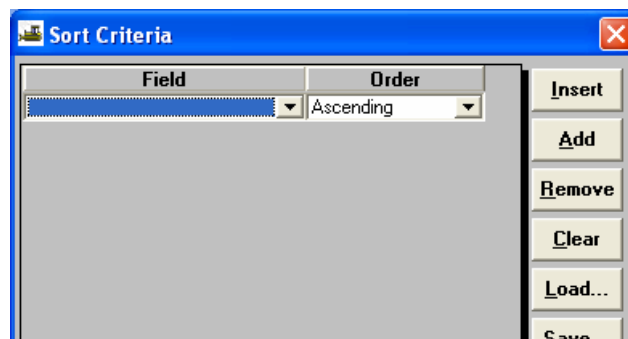
The sort is limited to Ascending order only. Each column may be sorted by “clicking” on the column header. Only one column may be sorted at a time, and previous column sorts are not retained. This method will serve the user’s needs the majority of the time.

Sorting by Object Panel Sort Function

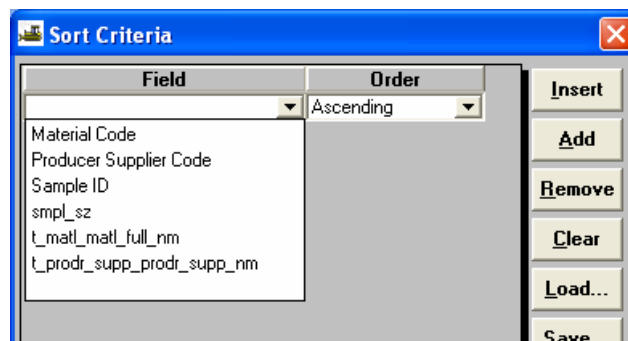
This method permits the user to sort in Ascending or Descending order, as well as use multiple columns for sorting.



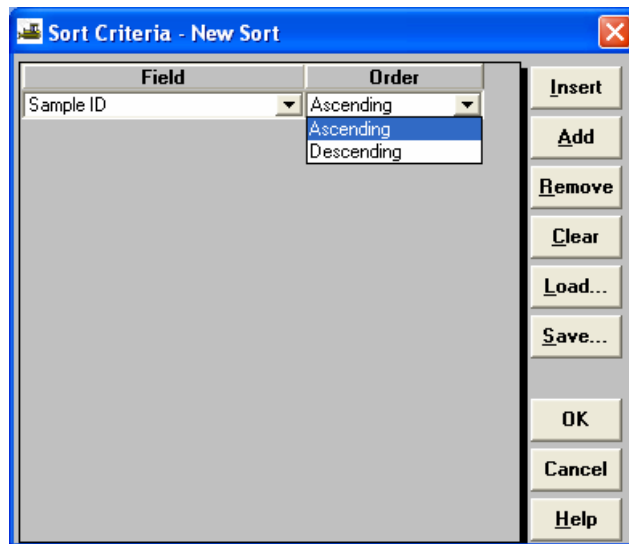
“Right-click” on the panel and “click” on **Sort**.



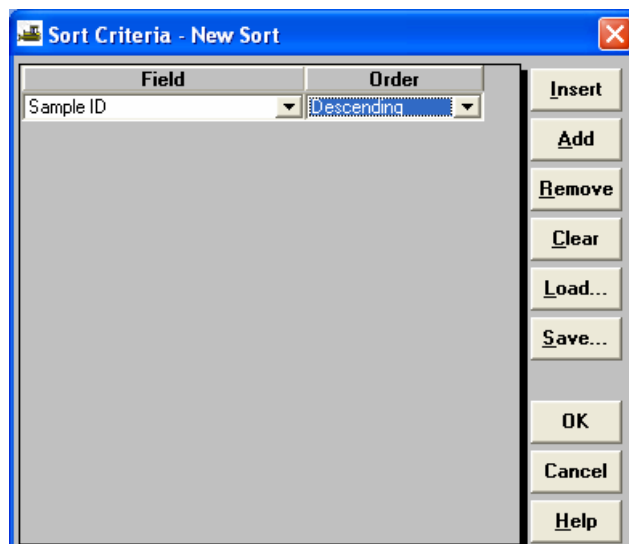
“Click” on the **Add** button on the **Sort Criteria** panel.



Select the criteria that are needed for the **Sort** in the **Field** drop down list.



Select either **Ascending** or **Descending** in the **Order** drop down list.

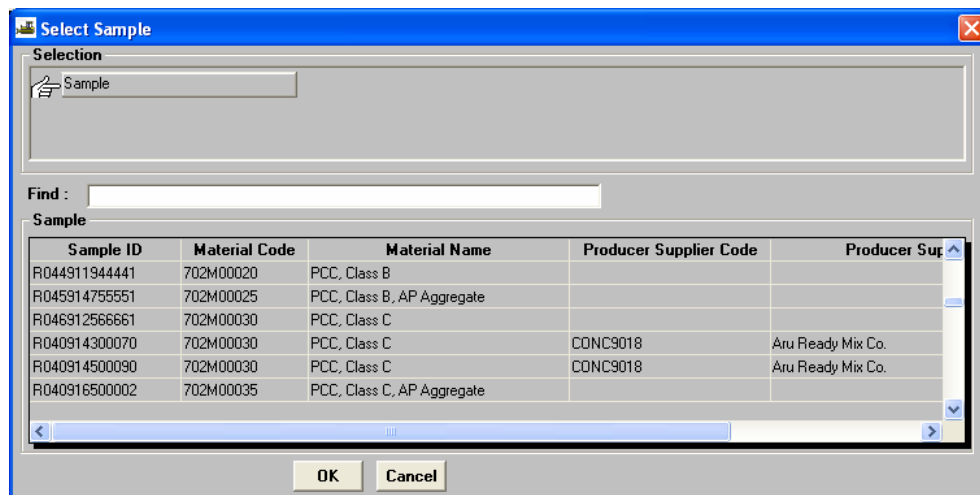


“Click” on the **OK** button on the **Sort Criteria** panel to apply the sort.



To include multiple columns in the sort, “Click” the **Add** button for each additional column needed. Notice that the sort will be done in the order as set in the criteria pop up window.

“Click” on the **OK** button to apply the sort.



A Sort can also be saved for future use. Refer to **Saving a Filter** described earlier in this document.

NOTE: Even though the user can set a **Default Sort**, this feature does not currently work correctly within SiteManager. The Default sort is not automatically applied when the window is opened. However, when opening the Sort Criteria window, the Default Sort will already be loaded. So, the user can just “Click” on the **OK** button to activate.

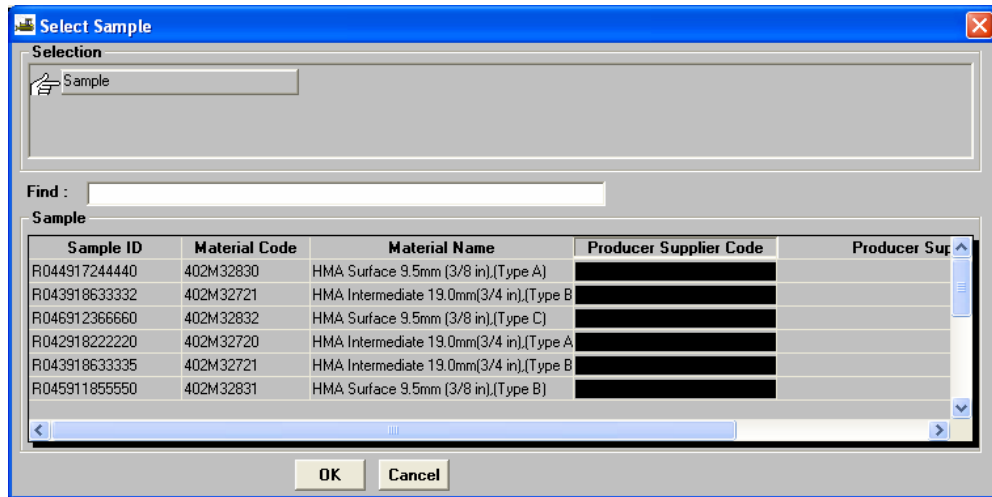
Find

There are 2 methods to locate specific data within a SiteManager window:

- by the **Find** field
- by object panel **Find** function

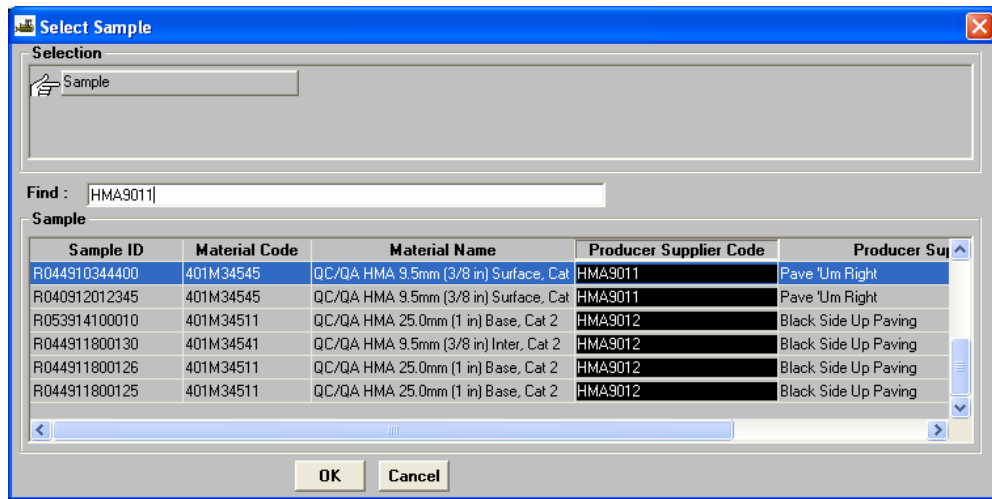
In general, the **Find** functions are available when opening a record, but they are not nearly as flexible as the **Filter** function.

Using the Find Field



Open the Select Sample window.

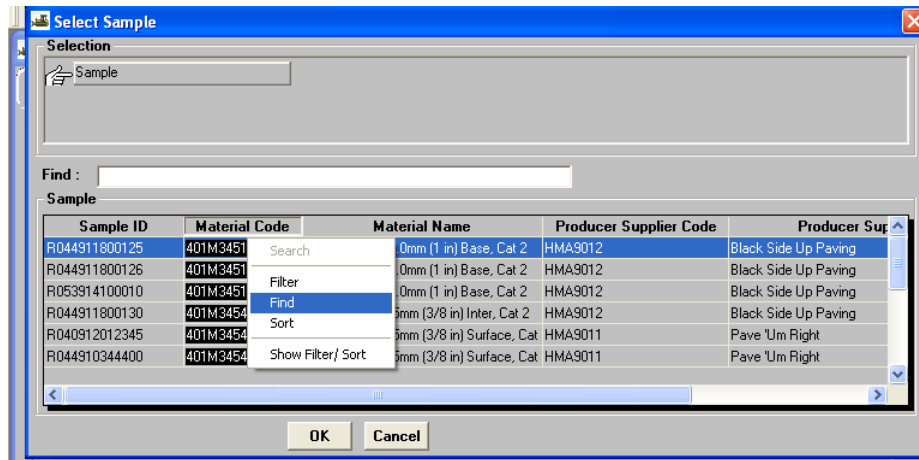
“Click” on a column header where the data is located.



“Click” in the **Find** field and enter the exact text. Notice that the column starts to sort as characters are entered into the **Find** field.

It should be noted that this type of **Find** will only find the first occurrence of a record that matches the **Find** field. If multiple records contain the same data as the **Find** field, only the first record can be found this way. For more flexibility, use the **Find** function as described below, or the Filter function described earlier in this document.

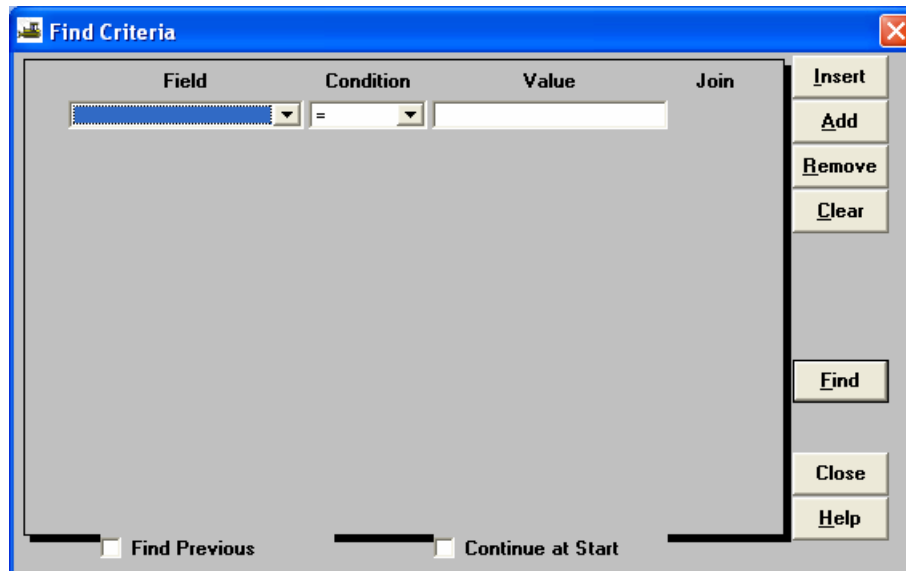
Using object panel Find function



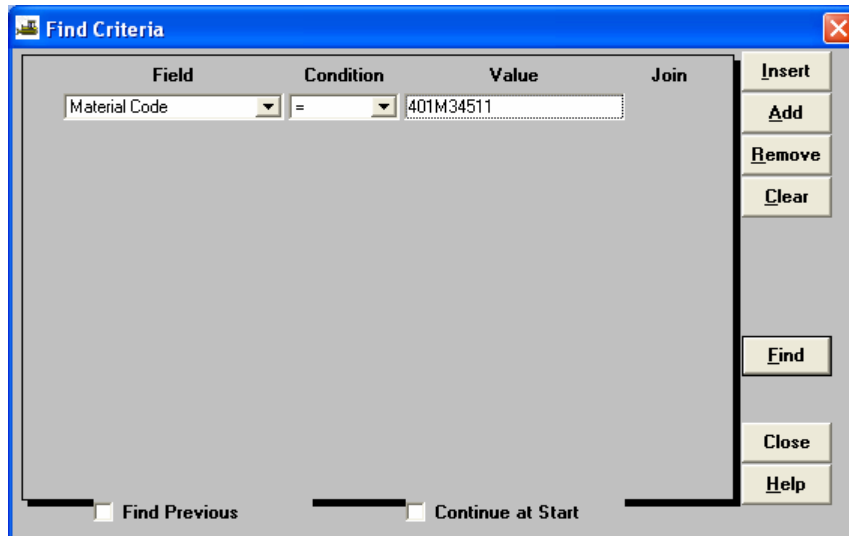
Open the Select Sample window.

“Right-click” in panel.

“Click” on **Find**. The **Find Criteria** panel will appear.

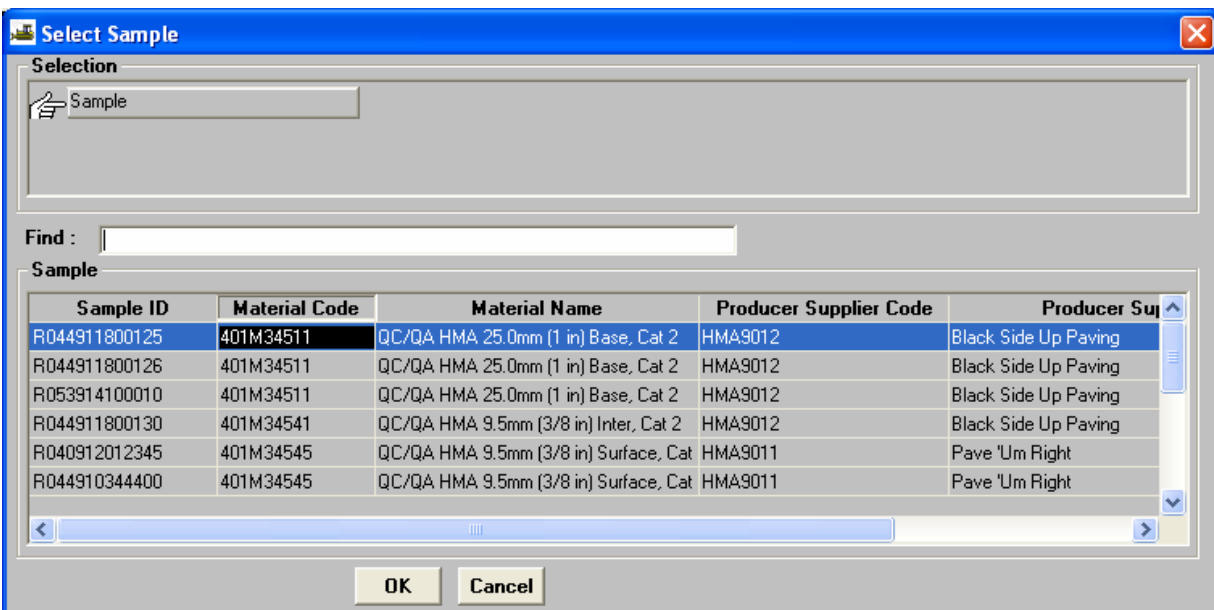


“Click” on the **Add** button located on the **Find Criteria** panel.



The **Find Criteria** dialog box is shown. It has a table with four columns: **Field**, **Condition**, **Value**, and **Join**. The **Field** column contains 'Material Code', the **Condition** column contains '=', and the **Value** column contains '401M34511'. To the right of the table are buttons: **Insert**, **Add**, **Remove**, **Clear**, **Find**, **Close**, and **Help**. At the bottom are checkboxes for **Find Previous** and **Continue at Start**.

After setting all the criteria for the **Find** filter, “click” the **Find** button located on the **Find Criteria** panel.



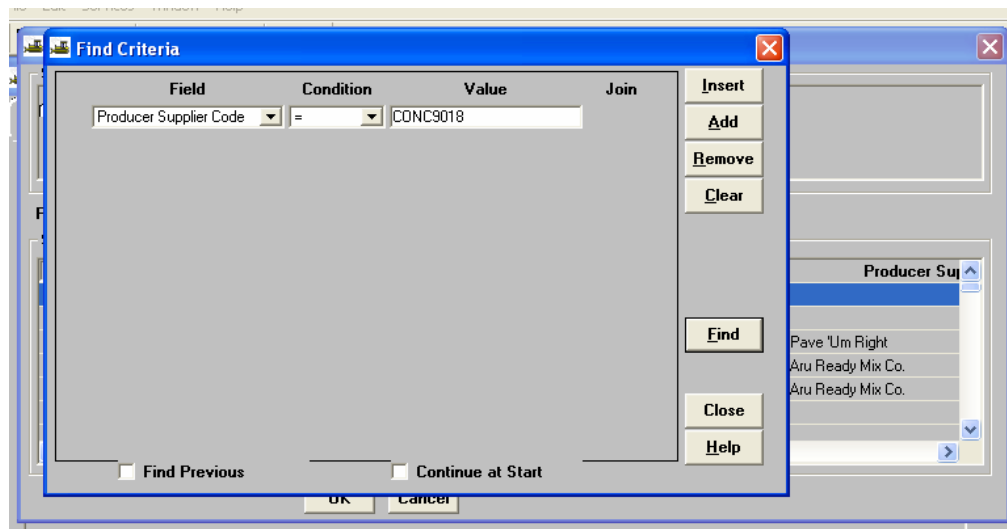
The **Select Sample** dialog box is shown. It has a **Selection** section with a **Sample** button. Below it is a **Find :** text box. Underneath is a table with the following data:

Sample ID	Material Code	Material Name	Producer Supplier Code	Producer Su
R044911800125	401M34511	QC/QA HMA 25.0mm (1 in) Base, Cat 2	HMA9012	Black Side Up Paving
R044911800126	401M34511	QC/QA HMA 25.0mm (1 in) Base, Cat 2	HMA9012	Black Side Up Paving
R053914100010	401M34511	QC/QA HMA 25.0mm (1 in) Base, Cat 2	HMA9012	Black Side Up Paving
R044911800130	401M34541	QC/QA HMA 9.5mm (3/8 in) Inter, Cat 2	HMA9012	Black Side Up Paving
R040912012345	401M34545	QC/QA HMA 9.5mm (3/8 in) Surface, Cat	HMA9011	Pave 'Um Right
R044910344400	401M34545	QC/QA HMA 9.5mm (3/8 in) Surface, Cat	HMA9011	Pave 'Um Right

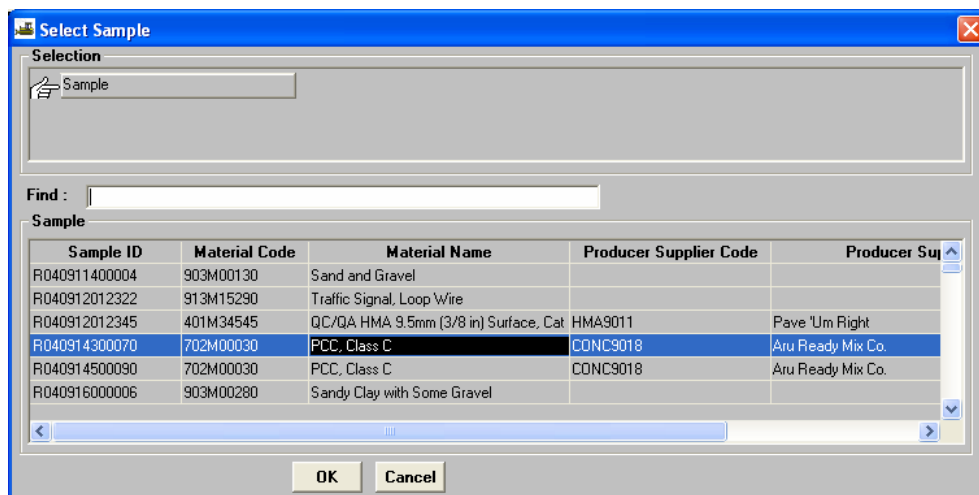
At the bottom are **OK** and **Cancel** buttons.

Note that the first row of data contains the value of the **Find** filter.

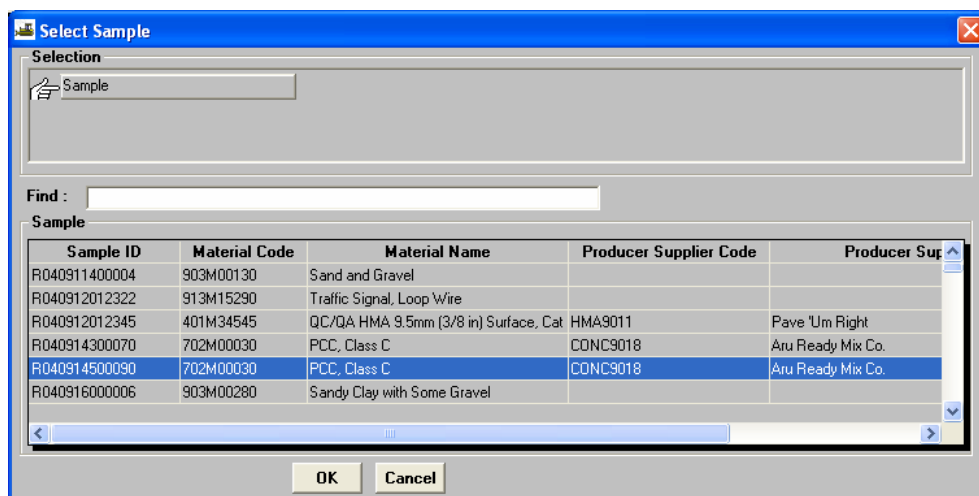
Again, the **Find** will only locate the first occurrence of a record matching the Find criteria.



In this example, the Find locates the first record with a Producer Supplier Code of **CONC9018**.



In order to find the next record with the same code, repeat the **Find** operation.



I-2 Individual Exercise

In the following exercise, you will open up Sample Information window and find all sample records that are associated to material code 401M34511.